# Matthew Senick

## EXPERIENCE

## Senior Data Analyst (Product Growth)

Mar 2023 - Present

7shifts

Saskatoon, SK

• Used Prefix Tree Spanning to map out common patterns in the action journeys taken by customers during their initial trial period

## Data Analyst (Product Growth)

Jun 2023 - Feb 2023

7shifts

Saskatoon, SK

- Drove ML engineering in the deployment of the companies first customer churn prediction model, and supported the rollout of predictions to the Saves team
- $\bullet$  Deployed a data ingestion script via Airflow to collect Google Places information on provided customer locations with an 80% location match rate
- Completely refactored and migrated DBT analytic engineering layers to Snowflake for Stripe billing, impacting over \$80 million in customer transaction data
- Genetically optimized a Hidden Markov Model which leveraged over 9 million customer trial actions with the intent of uncovering causal impact of actions to customer purchase decisions
- Owner of A/B test analysis, including but not limited to the following product areas: pricing page, plan trials, and the initial trial experience

## Lecturer (Economics)

Sep 2022 - Present

University of Saskatchewan

Saskatoon, SK

- Nominated for the Undergraduate Student Society Teaching Excellence Award
- Achieved a 100% satisfaction rate on "Overall Teaching Effectiveness" during my first semester, with 46% of students rating my teaching effectiveness amongst the top 5% of university instructors

## Business Process Data Scientist (Strategic Projects)

Jul 2022 - Jun 2023

StandardAero

Winnipeg, MB

- Spearheaded development of a Monte Carlo simulation that assessed risk distributions for quoting incoming engine contracts frequently exceeding \$2 million, impacting 1000+ employees and recognized with an intracompany award
- Developed cross-functional Discrete Event Simulations and dasboards to optimize production engineering metrics, enabling key decision makers to compare the forecasted impact of workflow and labour composition changes

### Research Assistant (Economics)

Dec 2021 - May 2022

University of Toronto

Toronto, ON

• Built supervised and unsupervised web-scraping NLP models to quantify amenity preference sentiment amongst labour force actors which were presented at ASSA 2022

#### Teaching Assistant (Economics)

Aug 2021 – May 2022

University of Toronto

Toronto, ON

- Led students in "Data Tools for Economists" and "Introduction to Data Analysis and Applied Econometrics"
- Obtained a 96% satisfaction rate in tutorial sessions for students learning data manipulation/analysis techniques

## Development and Database Manager (BI and Automation)

May - Sep 2020, May - Aug 2021

Affinity Credit Union

Saskatoon, SK

• Led a data analysis project regarding reporting server standards and create tangible reports regarding data usage

#### Intern Market Analyst (Member Experience)

Jan 2020 - Apr 2020

Affinity Credit Union

Saskatoon, SK

• Built a decision tree model to predict consumer product tendencies based on thousands of biographic data points

## Research Assistant (Computer Science)

May 2019 - Sep 2019

University of Saskatchewan

Saskatoon, SK

Aided in implementing and testing machine learning solutions for 'semantic code clone' detection research

## University of Toronto

Aug 2021 - May 2022

Master of Economics

Toronto, ON

• Relevant Coursework: Economic Applications of Machine Learning (A+), Statistical Methods for Machine Learning and Data Mining (A), Econometrics (A-)

## University of Saskatchewan

Sept 2017 - May 2021

Double Honours Bachelor in Economics and Computer Science

Saskatoon, SK

- cGPA: 3.87
- Awards: Lewis C. Gray Prize in Economics, Popoff Scholarship in Economics, Dean's Honour List, University of Saskatchewan Continuing Scholarship, NSERC Undergraduate Research Award, Greystone Entrance Award
- Relevant Coursework: Introduction to Empirical Economics (100%), Deep Learning (87%), Machines & Algorithms (94%), Simulation Principles (91%)

## TECHNICAL SKILLS

Skills: Machine Learning, Simulation, Econometric Analysis, Research Techniques, A/B Testing, Analytical Engineering Programming Languages: Python, SQL, R, DBT, Stata, C, Java, JavaScript, C++

Libraries: TensorFlow, Scikit-learn, Pytorch, Pandas, Selenium, Gensim, NLTK

Programs/Tools: DBT, Git, Tableau, Power BI, Anylogic, Weka, SQL Server, Jupyter, iGrafx, Salesforce, Snowflake,

Metabase, Mixpanel, Growthbook

Hobbies: Golf, Hockey, Chess, Freelance Web-Development